

1. Use of an amphipathic compound comprising a lipophilic group derived from a sterol linked to a cationic group, for the production of a vaccine composition.
2. ~~A use~~ according to Claim 1, characterized in that the lipophilic group is a cholesterol derivative.
3. ~~A use~~ according to ~~either of the preceding claims~~, characterized in that the cationic group is a quaternary ammonium or an amine which can be protonated.
4. ~~A use~~ according to ~~one of the preceding claims~~, characterized in that the lipophilic group is attached to the cationic group via an ester, ether, amide or carbamoyl link.
5. ~~A use~~ according to ~~one of the preceding claims~~, characterized in that the lipophilic group is separated from the cationic group by a branched or unbranched alkyl chain comprising from 1 to 20 carbon atoms.
6. ~~A use~~ according to ~~one of the preceding claims~~, characterized in that the amphipathic compound is selected from the following compounds:
- cholesteryl-3 β -carboxamidoethylenetrimethyl-
 - ammonium iodide,
 - 25 - cholesteryl-3 β -carboxamidoethylenamine,
 - cholesteryl-3 β -oxysuccinamidoethylene-
 - trimethylammonium iodide,

- 3β -[N-(N',N'-dimethylaminoethane) carbamoyl]-
cholesterol,
- 3β -[N-(polyethylenamine) carbamoyl] cholesterol.
7. ~~Ause~~ ~~Use~~ of 3β -[N-(N',N'-dimethylaminoethane)-
5 carbamoyl] cholesterol for the production of a vaccine
composition.
8. ~~Ause~~ ~~Use~~ according to ~~one of the preceding claims~~,
characterized in that the amphipathic compound is
combined with a neutral lipid.
10. ~~Ause~~ ~~Use~~ according to Claim 8, characterized in that
the proportion of neutral lipid combined is at least
20%.
10. ~~Ause~~ ~~Use~~ according to ~~either of Claims 8 and 9~~,
characterized in that the neutral lipid is
15 dioleyolphosphatidylethanolamine (DOPE) or
dioleyolphosphatidylcholine (DOPC).
11. ~~Ause~~ ~~Use~~ according to ~~one of the preceding claims~~,
characterized in that the amphipathic compound is
dispersed in an aqueous environment in the form of
20 liposomes.
12. ~~Ause~~ ~~Use~~ of an amphipathic compound comprising a
lipophilic group derived from a sterol linked to a
cationic group, as an adjuvant in the administration of
a vaccine.
- 25 13. ~~Ause~~ ~~Use~~ according to Claim 12, characterized in that
the said amphipathic compound is 3β -[N-(N',N'-dimethyl-
aminoethane) carbamoyl] cholesterol.

- A vaccine* - 24 - in 12 or 13
14. ~~Use~~ according to either of Claims 12 and 13, characterized in that the said amphipathic compound is combined with a neutral lipid.
15. ~~Vaccine~~ composition comprising at least one antigen, characterized in that it comprises, in addition, at least one amphipathic compound possessing a lipophilic group derived from a sterol linked to a cationic group.
16. ~~Vaccine~~ composition according to Claim 15, characterized in that the said lipophilic group is a cholesterol derivative.
17. ~~Vaccine~~ composition according to ~~either of~~ ~~Claims 15 or 16~~, characterized in that the said amphipathic compound is 3β -[N-(N',N'-dimethylaminoethane)carbamoyl]cholesterol.
18. ~~Vaccine~~ composition according to ~~one of~~ ~~Claims 15 to 17~~, characterized in that the said amphipathic compound takes the form of liposomes including at least one antigen.
19. ~~Vaccine~~ composition according to ~~one of~~ ~~Claims 15 to 18~~, characterized in that the said amphipathic compound is combined with a neutral lipid.
20. ~~Vaccine~~ composition according to ~~one of~~ ~~Claims 15 to 19~~, characterized in that it comprises at least one influenza virus antigen.
21. ~~Method~~ for inducing an immune response in a mammal, consisting in administering at least one antigen to the mammal, characterized in that it consists in administering, in addition, at least one amphipathic

compound comprising a lipophilic group derived from a sterol linked to a polar group.

22. ~~A method~~ according to Claim 21, characterized in that the said amphipathic compound is administered at 5 the same time as the antigen.

23. ~~A method~~ according to either of Claims 21 and 22, characterized in that the antigen is an influenza virus haemagglutinin.

24. ~~A product~~ containing at least one antigen and one 10 amphipathic compound comprising a lipophilic group derived from a sterol linked to a cationic group, as a combination product for use simultaneously, separately or staggered over time in vaccination.

Note B2

Note C